



Department of Energy

Washington, DC 20585

August 27, 1997

MEMORANDUM TO SECRETARIAL OFFICERS HEADS OF FIELD ELEMENTS

FROM: FEDERICO PEÑA *Federico Peña*

SUBJECT: LESSONS LEARNED FROM THE EMERGENCY
RESPONSE TO THE MAY 14, 1997 EXPLOSION AT
HANFORD'S PLUTONIUM RECLAMATION
FACILITY

This memorandum identifies actions to be taken at all DOE sites to implement lessons learned from the emergency response to the accident at the Plutonium Reclamation Facility on May 14, 1997¹. In my August 4, 1997 memorandum about this accident, I emphasized the safety-related lessons that must be implemented. Today I want to emphasize the emergency management lessons. The Richland Operations Office (RL) conducted the evaluation, and a summary is attached.

The Emergency Response report is intended to be a critique of the RL emergency response, and forms the basis for valuable lessons. I believe that these lessons can be applied throughout the Department to enhance our ability to respond to potential accidents, particularly in the areas of medical monitoring and treatment of personnel potentially affected by an accident involving hazardous material.

The lessons from the accident involve fundamental elements in our emergency management capabilities and competencies. We must :

- improve training for facility and site emergency management personnel
- assure that equipment and qualified personnel are ready for the wide variety of potential radiological and chemical hazards
- improve coordination with our local medical communities, and

¹ Report on the Emergency Response to the Event of May 14, 1997, at the Plutonium Reclamation Facility, Hanford Site, Richland, Washington, DOE/RL-97-62.

- have in place comprehensive procedures to attend to personnel who are potentially affected by an accident.

GENERAL ACTIONS. In order to implement these lessons, each DOE field office will work with their site contractors, local medical facilities, and community emergency response organizations to thoroughly examine the specific, interrelated action items below, make improvements, and report on their completion as set forth below. Enhanced training, drills, or exercises should result from this examination. In some cases, the actions taken may involve the formulation of agreements with community resources.

The status of these action items should be included in the report requested in my August 4, 1997 memorandum. That report is due December 31, 1997.

The Office of Nonproliferation and National Security in conjunction with the applicable responsible Secretarial office will provide technical assistance and guidance in this effort. Overall emergency management program guidance is contained in DOE G 151.1-1, *Emergency Management Guide*.

SPECIFIC ACTIONS. DOE Field and Operations Office managers shall take appropriate steps to assure that the following action items are accomplished as soon as possible and no later than the deadlines specified below. In some cases, immediate actions are called for within times specified; in all other cases requiring longer term actions, the actions will be accomplished not later than March 31, 1998.

- **EMERGENCY MANAGEMENT DECISION MAKING.** Emergency management decisions should be consistent with a conservative assessment of the situation. Emergency management training should emphasize making conservative judgments about facility conditions and personnel exposure in the absence of confirmed data. Key emergency management personnel will be trained on this matter within 60 days and Field Office Managers shall confirm that this milestone has been achieved. Realistic exercises will be conducted and will include and confirm this decision making capability.

- **PROTECTIVE EQUIPMENT AND STAFFING.** Personal protective equipment, equipment for field monitoring of chemical hazards, and qualified staff (e.g. industrial hygienist) needed for post accident activities must be readily available. Availability and qualification of critical personal protective equipment will be confirmed within 45 days. Sufficient numbers of qualified personnel must be available at all times for response and post accident activities involving chemical or radiological hazards. Readiness should be periodically verified in accordance with established Departmental requirements.
- **PROTECTIVE TREATMENT OF PERSONNEL.** Emergency procedures must provide for timely medical attention to injured or potentially exposed personnel; and policy and procedures must exist for the care and continued monitoring of affected personnel for an appropriate period after accidents. Review of such policy and procedures, with participation by local medical authorities and workers, will begin immediately and be completed within 90 days. Realistic exercises will be conducted and will include and confirm that procedures are implemented for the notification and protection of workers in a variety of remote locations (indoors and outdoors) at event onset, and that methods are available to control their sheltering. Security, medical, and other emergency responders must be trained to recognize the health impacts of potential accidents, including the effects of exposures to chemicals and the potential for post-traumatic effects associated with accidents.
- **HAZARDS INFORMATION.** Procedures must be in place to provide local medical facilities with available information on chemical and radiological hazards, as well as timely qualitative and quantitative exposure information for individuals in the event of an accident. Review and development of these procedures, in coordination with local medical facilities, will begin immediately and will be completed within 90 days. Realistic exercises will be conducted and will include and confirm the ability of DOE contractors to provide local medical facilities with adequate information for a variety of potential accidents to effectively diagnose and treat injured, exposed, or potentially exposed workers.

- **INDEPENDENT OVERSIGHT.** Beginning immediately the Assistant Secretary for Environment, Safety and Health shall include a review of site emergency management and response systems as a part of each Safety Management Evaluation carried out by the Office of Oversight.

Completion of these actions will be reported to me through the Office of Nonproliferation and National Security in conjunction with the responsible Secretarial offices by April 1, 1998, and subsequently documented in the annual Emergency Readiness Assurance Plan by November 30, 1998, in accordance with DOE O 151.1, *Comprehensive Emergency Management System*.